

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
PCE Chestnut - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: POLREP #1
Initial
PCE Chestnut

Atlantic, IA
Latitude: 41.4036007 Longitude: -95.0138776

To: Kenneth Buchholz, EPA

From: Susan Fisher, OSC

Date: 7/17/2015

Reporting Period: March 1, 2015 to July 1, 2015

1. Introduction

1.1 Background

Site Number:	A7B4	Contract Number:	
D.O. Number:		Action Memo Date:	5/18/2015
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	6/4/2015	Start Date:	6/4/2015
Demob Date:		Completion Date:	
CERCLIS ID:	IAN000703467	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Site Location

The PCE Chestnut Site is located in Cass County, Atlantic, Iowa. (41.407881 latitude, -95.013053 longitude). The Site is located in downtown Atlantic, Iowa, and consists of at least four former dry cleaning operations.

The Site borders the East Nishnabotna River. Approximately 7,000 people reside in Atlantic, Iowa.

The suspected sources of contamination are former dry cleaning operations, including 317 Chestnut Street, 500 Chestnut Street, 320 Chestnut Street, and 410 Poplar Street. Research of the city of Atlantic, Iowa, was conducted, including reviewing former city directories available in the Cass County Genealogical Society office of the Atlantic Public Library. Results of the search are:

317 Chestnut – A dry cleaning operation at 317 Chestnut began to advertise dry cleaning services starting in 1946 and operated into the 1990s.

500 Chestnut – It appears that dry cleaning operations began at this site in the late 1990s and closed sometime before 2014.

320 Chestnut – Dry cleaning operations began in the early 1990s and ended in a fire in the late 1990s. •

410 Poplar – Advertisements were found for dry cleaning operations at this site from 1972 to 1991.

These sites are surrounded by business and residential properties.

1.1.2.2 Description of Threat

The contaminants of concern at the Site are tetrachloroethene (PCE) and its degradation products. These contaminants are hazardous substances as defined by Section §101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and are designated as hazardous substances in 40 C.F.R. § 302.4.

During a vapor intrusion assessment conducted in March 2015 by the EPA for the PCE Former Dry Cleaners Site, the EPA discovered another former dry cleaner site (PCE Chestnut Street) to the west of the PCE Former Dry Cleaners Site. The levels of PCE vapors found in buildings at the Site present a significant health threat due to inhalation hazards.

1.1.3 Removal Preliminary Assessment/Removal Site Inspection Results

On March 30, 2015, the EPA collected subslab soil gas and indoor air samples from three properties along Chestnut Street in downtown Atlantic, Iowa. Samples were collected during a vapor intrusion assessment for the PCE Former Dry Cleaner site. Locations for the sampling were determined from past dry cleaners operating in the area.

On-Scene Coordinator (OSC) Susan Fisher met with Keith Wilken, Iowa Department of Natural Resources (IDNR) from the Atlantic IDNR field office during the week of March 30, 2015. The meeting was to explain to Keith how vapor intrusion samples were collected.

The levels of PCE vapors found in buildings at the Site present a significant health threat due to the inhalation hazards. PCE in the soil gas was found as high as 2,300,000 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and PCE in the indoor air as high as 550 $\mu\text{g}/\text{m}^3$ (Table 1). The elevated levels of PCE present an immediate human health risk and exceed the established indoor air and subslab soil gas screening and removal action levels for PCE (Table 2).

2. Current Activities

2.1 Operations Section

2.0 Current Activities

2.1 Operations

2.1.1 Narrative

The levels of PCE vapors found in buildings at the Site during removal assessment present a significant health threat due to inhalation hazards. Therefore, a time-critical removal action and 12-month emergency exemption action memorandum was signed on May 18, 2015.

2.1.1.1 Current situation

Vapor mitigation systems were installed in three properties on June 4 and 5, 2015 (Table 3).

2.1.2 Response activities to date

On May 11, 2015, OSC Susan Fisher met with Mayor David Jones and John Lund, Atlantic City Administrator, to discuss the sample results from the March 2015 sampling. OSC Fisher discussed the upcoming removal action for the PCE Chestnut Site and scheduled a public availability meeting for June 16, 2015 at the Atlantic City Hall.

No site activities from May 12, 2015 to June 15, 2015.

A public availability meeting was held on June 16, 2015, at the Atlantic City Hall at 6:30. Representatives at the meeting were:

Susan Fisher, EPA OSC and Project Manager
Ann Jacobs, EPA Risk Assessor
Dan Nicoski, EPA Hydrogeologist
Demetra Sallisbury, EPA Site Attorney
Pamela Houston, EPA Community Engagement Specialist
Erin Harman, Agency for Toxic Substance Disease Registry (ATSDR)
Environmental Health Specialist

A presentation was given by Susan Fisher, Ann Jacobs and Pamela Houston. A copy of the presentation is included in the documents section of this web site.

Additional vapor intrusion sampling is scheduled for this Site the weeks of July 13 and 20, 2015.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

PRPs have not been identified.

2.1.4 Progress Metrics

Table 1:

Vapor Intrusion Sampling

Address		Indoor Air or Sub Slab	Sample Number	PCE $\mu\text{g}/\text{m}^3$	TCE $\mu\text{g}/\text{m}^3$
315 Chestnut	3/30/2015	SS	6763-10	2,300,000	ND
315 Chestnut	3/30/2015	IA	6763-11	550	ND
319 Chestnut	3/30/2015	IA	6763-14	180	ND
312 Chestnut	3/30/2015	SS	6763-15	9,200	ND
312 Chestnut	3/30/2015	IA	6763-16	2.5	ND

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

SS = subslab soil gas sample

IA = indoor air sample

ND = Non Detect

= sample result is above screening level

PCE = tetrachloroethene

TCE = trichloroethene

Table 2

Removal Action Levels (see action memorandum in document section):

	PCE	
	Indoor Air Removal Action Levels $\mu\text{g}/\text{m}^3$	Sub-Slab Soil Gas Screening Levels $\mu\text{g}/\text{m}^3$
Residential	42	1,400
Commercial	180	6,000

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

PCE = tetrachloroethene

Table 3

Vapor Mitigation Systems Installed

Address	Date Installed
315 Chestnut	6/4/15
317 Chestnut	6/4/15
319 Chestnut	6/5/15

2.2 Planning Section

2.2 Planning

2.2.1 Anticipated activities for next reporting period

2.2.1.1 Planned Response Activities

Additional vapor intrusion sampling will be conducted and appropriate response actions taken.

Soil and groundwater samples will be collected to delineate the groundwater plume and source areas.

2.2.1.2 Next Steps

Additional vapor intrusion sampling is scheduled for this Site the weeks of July 13 and 20, 2015.

2.2.1.2 Issues

No issues at this time.

2.3 Logistics Section

No Information at this time

2.4 Finance Section

2.4 Finance

2.4.1 Narrative

"The accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery."

2.4.2 Metrics

Table of costs as appropriate for specific response. Could be tracked against Removal Ceiling, daily burn rate, etc.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$33,563.00	\$18,950.00	\$14,613.00	43.54%
TAT/START	\$58,872.00	\$2,000.00	\$56,872.00	96.60%
Intramural Costs				
USEPA - Direct	\$45,456.00	\$4,000.00	\$41,456.00	91.20%
USEPA - InDirect	\$143,327.00	\$10,475.00	\$132,852.00	92.69%
Total Site Costs	\$281,218.00	\$35,425.00	\$245,793.00	87.40%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information at this time

3. Participating Entities

3.0 Participating Entities

3.1 Unified Command

Environmental Protection Agency

3.2 Cooperating and Assisting Agencies

City of Atlantic, Iowa

4. Personnel On Site

4.0 Personnel On Site and Off Site

Susan Fisher, EPA OSC and Project Manager
Ann Jacobs, EPA Risk Assessor
Dan Nicoski, EPA Hydrogeologist
Demetra Sallisbury, EPA Site Attorney
Pamela Houston, EPA Community Engagement Specialist
Erin Harman, Agency for Toxic Substance Disease Registry (ATSDR) Environmental Health Specialist

5. Definition of Terms

5.0 Definition of Terms

µg/m³ - Micrograms per cubic meter
PRP - Potential Responsible Party
ND - Non Detect
SS - Subslab
IA - Indoor Air
PCE - Tetrachloroethene
TCE - Trichloroethene
APA - Abbreviated Preliminary Assessment
OSC - On Scene Coordinator
ATSDR - Agency for Toxic Substance Disease Registry
IDNR - Iowa Department of Transportation

6. Additional sources of information

6.0 Source of Additional Information

PCE (Tetrachloroethylene):

- A man-made chemical that is widely used for dry cleaning clothes.
- It evaporates easily into the air.
- a colorless liquid with a mild, chloroform-like odor - has a sharp, sweet odor

TCE (Trichloroethylene):

- Used to remove grease from fabricated metal parts and in the production of some textiles.
- PCE degrades to TCE under certain circumstances.
- A colorless or blue liquid with a chloroform-like odor - has a sharp, sweet odor

For more information about these chemicals go to:

<http://water.epa.gov/drink/contaminants/basicinformation>

7. Situational Reference Materials

7.0 Situational Reference Material: